

Citation for published version:

Blondel, P 2018, 'Mapping and living in marine habitats - Sonars, seismics and ambient sounds', UK/US Underwater Acoustics Conference, Oxford, UK United Kingdom, 4/12/18 - 5/12/18.

Publication date:
2018

Document Version
Peer reviewed version

[Link to publication](#)

University of Bath

Alternative formats

If you require this document in an alternative format, please contact:
openaccess@bath.ac.uk

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Mapping and living in marine habitats - Sonars, seismics and ambient sounds

Philippe Blondel, Department of Physics, University of Bath (UK)

Thorough mapping of the marine environments has started close to 70 years ago, and it makes use of increasingly sophisticated instruments mostly relying on acoustics. These instruments either create their own sounds and listen to their echoes, or rely exclusively on sounds produced naturally or by a variety of physical processes. We are using these tools to harvest resources like fish and hydrocarbons, to monitor the increases in commercial and recreational shipping, their sustainability and their impacts, and to de-risk the development of marine renewable energies. This creates challenges for data storage, long-term data access, reliable standardisation and interpretation, and for comparison between regions and between times. These challenges, and the different ways forward, will be illustrated with examples from Arctic waters to temperate coastal environments. The quantitative results afforded by acoustic measurements can then be meaningfully used to solve controversies, or add a useful evidence base to on-going activities and debates.